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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,784	10/16/2003	Winfried Feuerstein	32860-000628/US	7034

30596 7590 04/21/2005

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EXAMINER

MAYO III, WILLIAM H

ART UNIT PAPER NUMBER

2831

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,784

Applicant(s)

FEUERSTEIN ET AL. 

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/16/03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in present Application No. 10/685,784, filed on October 16, 2003.

Information Disclosure Statement

2. The information disclosure statement filed October 16, 2003 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

Drawings

3. Figures 4-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 7-10, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by GB Pat Num 443,017 (herein referred to as GB). GB discloses a generator output line (Figs 1-3) they may be utilized to connect a generator to a transformer (Page 1, lines 55-64). Specifically, with respect to claim 1, GB discloses an output line (Fig 2) comprising a cylindrical inner conductor (28 & 29) including an internal conductor tube (28) and an external conductor tube (29) and a cylindrical cladding tube (32-34) connection region arranged concentrically with respect to the inner conductors (28 & 29), wherein the current paths in the longitudinal direction of the inner conductor (28 & 29) are capable of changing at least once between the external conductor tube (29) and the internal conductor tube (28, i.e. currents of each 28 & 29 are running in parallel until the points where the internal and exterior conductor tubes are welded and then the current runs in series, Page 5, lines 117-120). With respect to claim 2, GB discloses that the internal and exterior conductor tubes (28 & 29) may be made of aluminum (Page 3, lines 49-50). With respect to claim 3, GB discloses that the current paths in a direct axis direction of the inner conductor (28 & 29) are capable of change once at a central position (i.e. where the tubes are welded) in the longitudinal direction of the inner conductor (28 & 29) between the external conductor tube (29) and

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the internal conductor tube (28). With respect to claim 4, GB discloses that the internal conductor tube (28) and the external conductor tube (29) of the inner conductor (28 & 29) are arranged concentrically (center of conductors, Fig 2). With respect to claim 7, GB discloses that the current paths in a direct axis direction of the inner conductor (28 & 29) are capable of change once at a central position (i.e. where the tubes are welded) in the longitudinal direction of the inner conductor (28 & 29) between the external conductor tube (29) and the internal conductor tube (28). With respect to claim 8, GB discloses that the internal conductor tube (28) and the external conductor tube (29) of the inner conductor (28 & 29) are arranged concentrically (center of conductors, Fig 2). With respect to claim 9, GB discloses that the internal conductor tube (28) and the external conductor tube (29) of the inner conductor (28 & 29) are arranged concentrically (center of conductors, Fig 2). With respect to claim 10, GB discloses that the internal conductor tube (28) and the external conductor tube (29) of the inner conductor (28 & 29) are arranged concentrically (center of conductors, Fig 2). With respect to claim 16, GB discloses a cylindrical inner conductor (28 & 29) comprising an internal conductor tube (28) and an external conductor tube (29) and a cylindrical cladding tube (32-34) connection region arranged concentrically with respect to the inner conductors (28 & 29). With respect to claim 17, GB discloses that the current paths in a direct axis direction of the inner conductor (28 & 29) are capable of change once at a central position (i.e. where the tubes are welded) in the longitudinal direction of the inner conductor (28 & 29) between the external conductor tube (29) and the

internal conductor tube (28). With respect to claim 18, GB discloses that the internal and exterior conductor tubes (28 & 29) may be made of aluminum (Page 3, lines 49-50).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 6 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB Pat Num 443,017 (herein referred to as GB) in Applicant's Own Admission of Prior Art (herein referred to as AOAPA). GB teaches a generator output line (Figs 1-3) they may be utilized to connect a generator to a transformer (Page 1, lines 55-64), which comprises a configuration that significantly reduces the heat produced by heavy

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currents being supplied (Page 1, lines 15-40) as disclosed above with respect to claims 1-3.

However, GB doesn't disclose generator output line is arranged in a generator connection region in the generator base (claims 6 & 14-15).

AOAPA teaches a known generator (Figs 4-5) wherein heavy current connections are made by generator output lines (see Background of Invention). Specifically, with respect to claim 6 & 14-15, AOAPA discloses a generator (not shown) comprising an output line (10), wherein the output line (10) extends through a generator base (14) including an opening through three electrical connections (16) of a three phase system exit the generator base (14), wherein each of the output lines of the three phases includes an cylindrical inner conductor (11) and a cylindrical cladding tube (12) connection region (at 20) arranged concentrically with respect to the inner conductor (11) and the three phase system exits the generator base (14) at least one connection piece (12) and at least one generator bushing (20).

With respect to claim 6 & 14-15, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the output line of GB to comprise be utilized in a generator connection region in the generator base as taught by AOAPA because AOAPA teaches that such a configuration is well known and commonly configured wherein heavy current connections are made by generator output lines (see Background of Invention).

9. Claims 19-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Own Admission of Prior Art (herein referred to as AOAPA) in view of GB Pat Num 443,017 (herein referred to as GB). AOAPA discloses a known generator (Figs 4-5) wherein heavy current connections are made by generator output lines (see Background of Invention). Specifically, with respect to claim 19, AOAPA discloses a generator (not shown) comprising an output line (10), wherein the output line (10) includes an cylindrical inner conductor (11) and a cylindrical cladding tube (12) connection region (at 20) arranged concentrically with respect to the inner conductor (11). With respect to claim 21, AOAPA discloses that the inner conductor (11) is made of aluminum (Page 2, paragraph 5 of Applicant's Specification). With respect to claim 22, AOAPA discloses a generator base (Fig 4) including an opening through three electrical connections (16) of a three phase system exit the generator base (14), wherein each of the output lines of the three phases includes an cylindrical inner conductor (11) and a cylindrical cladding tube (12) connection region (at 20) arranged concentrically with respect to the inner conductor (11). With respect to claim 23, AOAPA discloses that the three phase system exits the generator base (14) at least one connection piece (12) and at least one generator bushing (20). With respect to claim 24, AOAPA discloses that the inner conductor (11) is made of aluminum (Page 2, paragraph 5 of Applicant's Specification).

However, AOAPA doesn't specifically disclose inner conductor comprising internal conductor and an exterior conductor (claims 19 & 22), nor the current paths in a longitudinal direction of the inner conductors being adapted to change at least one

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between the external conductor tube and the internal conductor tube (claims 20 & 25-26), nor the internal conductor comprising internal and external conductor tubes (claim 27).

GB teaches a generator output line (Figs 1-3) they may be utilized to connect a generator to a transformer (Page 1, lines 55-64), which comprises a configuration that significantly reduces the heat produced by heavy currents being supplied (Page 1, lines 15-40). Specifically, with respect to claims 19 & 22, GB discloses an output line (Fig 2) comprising a cylindrical inner conductor (28 & 29) including an internal conductor tube (28) and an external conductor tube (29) and a cylindrical cladding tube (32-34) connection region arranged concentrically with respect to the inner conductors (28 & 29), wherein the current paths in the longitudinal direction of the inner conductor (28 & 29) are capable of changing at least once between the external conductor tube (29) and the internal conductor tube (28, i.e. currents of each 28 & 29 are running in parallel until the points where the internal and exterior conductor tubes are welded and then the current runs in series, Page 5, lines 117-120). With respect to claims 20 & 25-26, GB teaches that the current paths in a direct axis direction of the inner conductor (28 & 29) are capable of change once at a central position (i.e. where the tubes are welded) in the longitudinal direction of the inner conductor (28 & 29) between the external conductor tube (29) and the internal conductor tube (28). With respect to claim 27, GB discloses that the internal conductor tube (28) and the external conductor tube (29) of the inner conductor (28 & 29) are arranged concentrically (center of conductors, Fig 2).

With respect to claims 19, 22, 20, & 25-26, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the inner conductor of AOAPA to comprise the interior and external configuration as taught by GB because GB teaches that such a configuration significantly reduces the heat produced by heavy currents being supplied (Page 1, lines 15-40).

Allowable Subject Matter

10. Claims 5 & 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: This invention deals with a generator output line comprising an inner conductor comprising an internal and exterior conductor, wherein the internal and external conductor tubes are separated in a transverse direction and connected to one another again, crossed over, in order to change the current paths (claims 5 & 11-12).

Conclusion

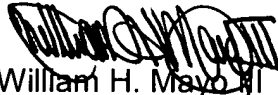
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Forsyth et al (Pat Num 3,902,000), Schmidt (Pat Num 4,393,714), and Grunert (Pat Num 4,197,571), all of which disclose generator terminations.

Communication

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
April 10, 2005